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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/535,158	03/24/2000	Katsuhiro Aoki	0557-49331-2	1887

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ALEXANDRIA, VA 22314

EXAMINER

GRAINGER, QUANA MASHELL

ART UNIT	PAPER NUMBER
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2852

DATE MAILED: 06/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/535,158

Applicant(s)

2852

Examiner

Q. GRAINGER

Group Art Unit

2852

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☒ Responsive to communication(s) filed on 3/19/2003
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-13, 15-27, 29 is/are pending in the application.
- Of the above claim(s) 1-11, 15-25, 29 is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 12, 26 is/are rejected.
- ☒ Claim(s) 13, 27 is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_ ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 12 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wada et. al. in view of the admitted prior art of record. Wada et al. teaches a latent image bearing member 1 having a potential thereon; a developing device 12, the developing device including, a

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conveyor member 2-3 configured to convey the one-component developer from a one-component developer supply and to a developing region where part of the developer-bearing member is closely spaced next to a part of the latent image bearing member 1, a thin layer forming device 7 configured to form the one-component developer being conveyed on the conveyor member into a uniform thin layer having a height corresponding to 1 to 1.5 times the diameter of the toner particles of the one-component developer. The development region includes a gap between the conveyor surface portion and the opposed photoconductive surface portion that is equal to or less than about 150 micron.

Wada et al. also teaches an image forming apparatus comprising means for bearing a latent image including image areas and means for applying a developing bias voltage 10 to the means for conveying when the developing operation is performed; the thin layer forming device 7 configured to form the one-component developer on the conveyor member 1 into a uniform thin layer having a height corresponding to 1 to 1.5 times a diameter of the toner particles of the one-component developer. Wada et al. does not teach a two level developing method.

The admitted prior art of record teaches that a two level developing method is conventional (specification: page 1, lines 12-18). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the teaching of Wada et al. with an image forming device using a developing method such as taught by the admitted prior art of record to also avoid agglomerates and obtain agglomerates free developer (column 1, line 65 - column 2, line 5).

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*Allowable Subject Matter*

3. Claims 13 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims,

*Response to Arguments*

4. Applicant's arguments have been considered but they are moot in view of the new rejection.

*Contact Information*

5. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Quana Grainger whose telephone number is 703-3087616. The examiner can normally be reached on weekdays between the hours of 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on 703-308-1373. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7382 for regular communications and 703-305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-3431.

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Quana Grainger  
Primary Examiner  
Art Unit 2852

QG  
June 2, 2003